

receiving Office use only	
International Application, to.	
International Filing Date	
Name of receiving Office and "PCT International Applica	tion"
Applicant's or agent's file reference	

REQUEST	į l
-	International Filing Date
The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.	Name of receiving Office and "PCT International Application"
according to the same of a	Applicant's or agent's file reference (if desired) (12 characters maximum) 2002.002
Box No. I TITLE OF INVENTION	
MEMBRANE MODULE FOR SEPARATION OF FLUIDS	
Box No. II APPLICANT This person	n is also inventor
Name and address: (Family name followed by given name; for a legal entity,	full official designation. Telephone No.
Name and aiditisss. (Pamay name followers) strong The country of the author address must include postal code and name of country. The country of the author address the applicant's State (that is, country) of residence if no State of residence is	is indicated below.) 713.431.4811
EXXONMOBIL UPSTREAM RESEARCH COMPANY P. O. Box 2189	713.431.4664
Houston, Texas 77252-2189 United States of America	Teleprinter No.
	Applicant's registration No. with the Office
State (that is, country) of nationality: US	State (that is, country) of residence: US
all designated all designated	tted States except States of America only the States indicated in the States of America only the Supplemental Box
Box No. III FURTHER APPLICANT(S) AND/OR (FUR	RTHER) INVENTOR(S)
Name and address: (Family name followed by given name; for a legal entity, The address must include postal code and name of country. The country of the a Box is the applicant's State (that is, country) of residence if no State of residence RUBAS, Paul J. 8906 Pontiac Drive Houston, Texas 77096 United States of America	applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality: US	State (that is, country) of residence: US
	ated States except Is the United States the States indicated in the States of America only the Supplemental Box
Further applicants and/or (further) inventors are indicated	on a continuation sheet.
	VE; OR ADDRESS FOR CORRESPONDENCE
The person identified below is hereby/has been appointed to ac of the applicant(s) before the competent International Authoriti	et on behalf agent common representative les as:
Name and address: (Family name followed by given name; for a legal entity The address must include postal code and name of court	y, full official designation. Telephone No.
COLLINS, Douglas J. ExxonMobil Upstream Research Company	Facsimile No. 713.431.4664
P. O. Box 2189 Houston, Texas 77252-2189 United States of America	Teleprinter No.
	Agent's registration No. with the Office 43,561 are no agent or common representative is/has been appointed and the to which correspondence should be sent.



DESIGNATION OF STATES Box No.V

Mark the applicable check-boxes

: at least one must be marked.

The following designations are hereby made under Rule 4.9(a):

Regional Patent

- ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (if other kind of protection or treatment desired, specify on dotted line)
- Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of
- European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT **EP**
- OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line

Na	tional I	Patent (if other kind of protection or i	treat	ment	desired, specify on dotted line):	_		
	AE	United Arab Emirates	\boxtimes	GM	Gambia			New Zealand
図	AG	Antigua and Barbuda	\boxtimes	HR	Croatia	×	OM	Oman
	AL	Albania	\mathbf{X}	HU	Hungary	X	PH	Philippines
_	AM	Armenia	\boxtimes	ID	Indonesia	M	PL	Poland
図	-AT	Austria	X	TL:	Israel	X	PT	Portúgal
_	ΑÜ	Australia		IN	India			
	AZ			IS	Iceland	X	RU	Russian Federation
_	BA		\boxtimes	JР	Japan			
	BB	Barbados	X	KE	Kenya	X	SC	Seychelles
_	BG	Bulgaria	\boxtimes	KG	Kyrgyzsta	X	SD	Sudan
	BR	Brazil	X	KР	Democratic People's Republic			
_	BY	Belarus			of Korea	X	SG	Singapore
	BZ	Belize	X	KR	Republic of Korea	X	SK	Slovakia
	CA	Canada	\boxtimes	ΚZ	Kazakhstan			
		LI Switzerland and Liechtenstein	X	LC				Tajikistan
_	CN				Sri Lanka			Turkmenistan
	CO	Colombia	X	LR	Liberia	_		Tunisia
×		Costa Rica	X	LS	Lesotho	X	TR	Turkey
X		Cuba	X	LT	Lithuania	X	TT	Trinidad and Tobago
_	CZ	Czech Republic	\boxtimes	LU	Luxembourg			
	DE	Germany	\boxtimes	LV	Latvia			United Republic of Tanzania
×	DK	Denmark	X	MA	Morocco			Ukraine
X	DM	Dominica	\boxtimes	MD	Republic of Moldova	X	UG	Uganda
X	DZ	Algeria				X	US	United States of America
X	EC	Ecuador	X	MG	Madagascar			
	EE	Estonia	\boxtimes	MK	The former Yugoslav Republic of	X	UΖ	Uzbekistan
×	ES	Spain			Macedonia	×	VC	Saint Vincent and the Grenadines
	FI	Finland	\boxtimes	MN	Mongolia			Viet Nam
X		United Kingdom	×	MW	/ Malawi			Yugoslavia
X		Grenada	\mathbf{X}	MX	Mexico			South Africa
X	GE	Georgia	X	MZ	Mozambique			Zambia
X		Ghana	\mathbf{X}	NO	Norway	X	ZW	Zimbabwe
				1 .	the base because marks to the DOT of	۵	i.cm-	anno of this sheet
C	heck-b	oxes below reserved for designating S	state	s whi	on nave become party to the PCI at	ici Ka	issui	
X		ICARAGUA	M	S.Y.	SYRIAN ARAB REPUBLIC		L	
X	PG F	PAPIJA NEW GUINEA	\boxtimes	E.G.	EGYPT	ш		

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time

PG PAPUA NEW GUINEA



Supplemental Box is not used, this sheet should not be in



Supplemental Box

2.

If, in any of the Boxes, except Boxes Nos VIII(i) to (v) for which a 1. special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No...." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:

if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;

(ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Box No. III" and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;

if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Box No. III and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;

if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;

if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation"—part": in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;

if, in Box No. VI, there are more than five earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.

If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.

Continuation of Box No. IV:

HOEFLING, Marcy M.; KATZ, Gary P.; LAWSON, Gary D.; PLUMMER, J. Paul; SMITH, Charles E.; WARNER, Darrell E.; WILSON, Pamela L.; WOLFS, Denise Y.

d in the request.

EXXONMOBIL UPSTREAM RESEARCH COMPANY

P. O. Box 2189 Houston, Texas 77252-2189 **United States of America**

	SI	heet No	<u></u>	
Box No. VI PRIORITY C				
he priority of the following	lier application(s) is hereby	/ claimed:		
Filing date of earlier application (day/month/year)	Number of earlier application	national application: country or Member of WTO	/here earlier application regional application:* regional Office	is: international application: receiving Office
item (1) 19 December 2002 (19/12/02)	60/434,947	US		
item (2)				
item (3)				
item (4)				
item (5)				
Further priority claims a	re indicated in the Supplem	ental Box.		
	n is an ARIPO application, in ber of the World Trade Organization. TIONAL SEARCHING A carching Authority (ISA) a Authority chosen; the two-let carlier search; reference to	UTHORITY (if two or more International ter code may be used): to that search (if an earlie	party to the Paris Conven pplication was filed (Rule 4 al Searching Authorities a	re competent to carry out th
The following declarations check-baxes below and indi	Li Barra No	os. VIII (i) to (v) (mark th number of each type of de	ne applicable cclaration):	Number of declarations
Box No. VIII (i)	Declaration as to the ide			:
Box No. VIII (ii)	Declaration as to the app date, to apply for and be	olicant's entitlement, as at t granted a patent	he international filing	: 1
Box No. VIII (iii)	Declaration as to the app date, to claim the priorit	plicant's entitlement, as at t y of the earlier application	the international filing	: 2
Box No. VIII (iv)	Declaration of inventors United States of Americ	thip (only for the purposes a)	of the designation of the	1
Box No. VIII (v)	Declaration as to non-pr	rejudicial disclosures or ex	ceptions to lack of novel	ty:

\	Sheet No.				5	·	
		_	_	_			

ARATION: ENTITLEMENT TO APPLY FOR AND BE CRANTED A PATENT

The declaration must configurate the standardized wording provided for in Section 212; the standardize

Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:

In relation to this International Application

EXXONMOBIL UPSTREAM RESEARCH COMPANY is entitled to apply for and be granted a patent by virtue of the following:

an assignment from RUBAS, Paul J. to EXXONMOBIL UPSTREAM RESEARCH COMPANY, dated 3 January, 2003 (03.01.03).

This declaration is made for the purposes of all designations, except the designations of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

Chas	t No.			1	6	
SHE	T INO.	-	_	_	•	

DECLARATION: ENTITLEMENT TO CLAIM PRIORITY

Box No. VIII (iii) The declaration must configure the standardized wording provided for in Section 213; otes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific votes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

In relation to this International Application

EXXONMOBIL UPSTREAM RESEARCH COMPANY is entitled to claim priority of earlier application

No. 60/434,947 filed 19 December 2002 (19.12.02)

by virtue of the following:

an Assignment from RUBAS, Paul J. to EXXONMOBIL UPSTREAM RESEARCH COMPANY dated 3 January, 2003 (03.01.03).

This declaration is made for the purposes of all designations, except the designations of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".





Box No. VIII (iii) DECLARATION: ENTITLEMENT TO CLAIM PRIORITY

The declaration must conform the standardized wording provided for in Section 213; Section Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific votes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

In relation to this International Application

RUBAS, Paul J. is entitled to claim priority of earlier application

No. 60/434,947 filed 19 December 2002 (19.12.02)

by virtue of the following:

the applicant is the inventor of the subject matter for which protection was sought by way of the earlier application.

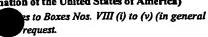
This declaration is made for the purposes of the following designations for national and/or regional patents: US.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".

DECLARATION: INVENTORSHIP (only for the purposes of the designation of the United States of America)

Box No. VIII (iv) DECI
The declaration must conform
and the specific Notes to Box N

collowing standardized wording provided for in Section 214; s I (iv). If this Box is not used, this sheet should not be included



Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America:

for the barboses of the georganism of the	
hereby declare that I believe I am the original, first and sole (if only nventor is listed below) inventor of the subject matter which is claimed a	ad for which a parties - 2 - 2 - 2
This declaration is directed to the international application of which it for	
This declaration is directed to international application No. PCT/ o Rule 26ter).	(if furnishing declaration pursuant
hereby declare that my residence, mailing address, and citizenship are a	s stated next to my name.
I hereby state that I have reviewed and understand the contents of the claims of said application. I have identified in the request of said apploreign priority, and I have identified below, under the heading "Prior A the World Trade Organization, day, month and year of filing, any application than the United States of America, including any PCT internationa United States of America, having a filing date before that of the application	pplications," by application number, country or Member of ation for a patent or inventor's certificate filed in a country application designating at least one country other than the
Prior Applications:	
I hereby acknowledge the duty to disclose information that is known by §1.56, including for continuation-in-part applications, material information application and the PCT international filing date of the continuation	n-in-part application.
I hereby declare that all statements made herein of my own knowledge belief are believed to be true; and further that these statements were ma- like so made are punishable by fine or imprisonment, or both, under S such willful false statements may jeopardize the validity of the application	ection 1001 of Title 18 of the United States Code and that
Name: RUBAS, Paul J. Residence: Houston, Texas (city and either US state, if applicable, or country) Mailing Address: 8906 Pontiac Drive Houston, Texas 77096	
Citizenship: United States of America Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	(of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)
Name:	
Residence: (city and either US state, if applicable, or country)	
Mailing Address:	
Citizenship: Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	Date: (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)
This declaration is continued on the following sheet, "Continuation	n of Box No. VIII (iv)".

	Sheet No9	
Box No. IX CHECK LIST-LANGUAGE OF	FILING	
This international application This international application in this internation application of the sequence listings This international application in this internation application and or of this internation application applica	This international application is accompliated item(s) (mark the applicable check-boxes below and indicate in right column the number of each item): 1. If fee calculation sheet 2. original separate power of attorney 3. original general power of attorney 4. copy of general power of attorney; reference number, if any: 5. statement explaining lack of signature 6. priority document(s) identified in Box No. VI as item(s): 7. translation of international application into (language): 8. separate indications concerning deposited microorganism or other biological material 9. copy submitted for the purposes of international sear under Rule 13ter only (and not as part of the internat application) (ii) copy submitted for the purposes of international sear under Rule 13ter (iii) copy for the purposes of international search under Rule 13ter (iiii) copy submitted for the sequence listings mentioned 10. tables in computer readable form related to sequence listing in computer readable form related to sequence listing in copy submitted for the purposes of international search under (indicate type and number of carriers) (i) copy submitted for the purposes of international search under copy or copies with the sequence listings mentioned 10. copy submitted for the purposes of international search under section 802(b-quater) only (and not as part of the international application) (ii) (only where check-box (b)(ii) or (c)(ii) is marked in column) additional copies including, where applicate international application)	: 1 : 1 : 1 : 1 : 1 : the in left : stings rch under : left ole, the Section : f the copy : :
Figure of the drawings which should accompany the abstract:	Language of filing of the international application: ENGLISH	
	AGENT OR COMMON REPRESENTATIVE and the capacity in which the person signs (if such capacity is not obvious from rea 7/33/03 Date	ding the request).
	The contract Office use only	
Date of actual receipt of the purported international application: Corrected date of actual receipt due to later timely received papers or drawings comple purported international application:	For receiving Office use only r but sting the	2. Drawings:
4. Date of timely receipt of the required corrections under PCT Article 11(2):		not received
5. International Searching Authority (if two or more are competent): ISA	6. Transmittal of search copy delayed until search fee is paid	

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

D		T
r	C	1

1

FEE CALCULATION SHEET

For ving Office use	only
International Application No.	

Annex to the Request	1	Į
Applicant's or agent's file reference 2002.002	Date stamp of the receiving Office	
Applicant EXXONMOBIL UPSTREAM RESEARCH COMPANY		
CALCULATION OF PRESCRIBED FEES		
1. TRANSMITTAL FEE	240.00 T	
2. SEARCH FEE International search to be carried out by (If two or more International Searching Authorities are competent to carry search, indicate the name of the Authority which is chosen to carry out the	y out the international international search.)	
3. INTERNATIONAL FEE Rasic Fee		
Where item (b) and/or (c) of Box No. IX apply, enter Sub-total nu Where item (b) and (c) of Box No. IX do not apply, enter Total nu	imber of sheets	
b1 first 30 sheets b2 0 x 12.00 = number of sheets in excess of 30	0.00 b2	
additional component (only if sequence listings and/or tables thereto are filed in computer readable form under Section 801 both in that form and on paper, under Section 801(a)(ii)):		
400 x =	b3	
fee per sheet	476.00 B	
Add amounts entered at b1, b2 and b3 and enter total at B · · ·	*	
The international application contains 122 designations. 5 x 104.00 = 104.00	520.00 D	
payable (maximum 5)	996.00	
Add amounts entered at B and D and enter total at I	of the	
(Applicants from certain States are entitled to a reduction of 75% international fee. Where the applicant is (or all applicants are) so entitle		
4. FEE FOR PRIORITY DOCUMENT (if applicable)	1,956.00	
5. TOTAL FEES PAYABLE		
Add amounts entered at T, S, I and P, and enter total in the TOTA	AL box	
The designation fees are not paid at this time.		
MODE OF PAYMENT		
authorization to charge postal money order deposit account (see below)	ash coupons	
cheque bank draft	revenue stamps other (specify):	
AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT AC (This mode of payment may not be available at all receiving Offices,	CCOUNT Receiving Office: RO/US	
	Deposit Account No.: 05-1328	
Authorization to charge the total fees indicated above.	Date: 9 43/13	
(This check-box may be marked only if the conditions for depetithe receiving Office so permit) Authorization to charge any credit any overpayment in the total fees indicated above.	osit accounts of y deficiency or Name: Douglas J. COLLINS	
Authorization to charge the fee for priority document.	Signature:	
Form PCT/RO/101 (Annex) (January 2003) LegalStar 2003, Form PCTREQ	Eee Notes to the fee calculati	on she